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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/580,523	05/30/00	ZHOU	X A7483

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EXAMINER

DAVIS, M

ART UNIT	PAPER NUMBER
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1642

DATE MAILED:

08/29/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/580,523

Applicant(s)
Zhou, X-M

Examiner
Minh-Tam Davis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Feb 1, 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-69 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claims 1-69 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

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DETAILED ACTION

Election/Restriction

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-3, 10, 13, 16, 19, 22, 25, 28, drawn to a mutant of SEQ ID NO:1, classified in class 530, subclass 350.

II. Claims 4-9, 11, 12, 14, 15, 17, 18, 20, 21, 23, 24, 26, 27, 29, 30, drawn to a mutant of SEQ ID NO:2 or 3, classified in class 530, subclass 350.

III. Claims 31-34, drawn to a method of making a mutant of SEQ ID NO:1, classified in class 424, subclass 184.1.

IV. Claims 31-34, drawn to a method of making a mutant of SEQ ID NO:2 or 3, classified in class 424, subclass 184.1.

V. Claims 35-36, drawn to a method of screening drugs that promote apoptosis, comprising contacting a candidate drug with SEQ ID NO:1 mutant, classified in class 435, subclass 7.1.

VI. Claims 35-36, drawn to a method of screening drugs that promote apoptosis, comprising contacting a candidate drug with SEQ ID NO:2 or 3 mutant, classified in class 435, subclass 325.

VII. Claims 37-40, drawn to a method of inducing apoptosis in a cell expressing SEQ ID NO:1 mutant, classified in class 435, subclass 325.

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VIII. Claims 37-40, drawn to a method of inducing apoptosis in a cell expressing SEQ ID NO:2 or 3 mutant, classified in class 435, subclass 325.

IX. Claims 41-42, drawn to a method for assaying a compound for phosphatase activity capable of dephosphorylating SEQ ID NO:1 mutant, classified in class 435, subclass 7.1.

X. Claims 41-42, drawn to a method for assaying a compound for phosphatase activity capable of dephosphorylating SEQ ID NO:2 or 3 mutant, classified in class 435, subclass 7.1.

XI. Claims 43-44, drawn to a method for screening drugs that promotes cell survival, comprising assaying for phosphorylation of SEQ ID NO:1 mutant, classified in class 435, subclass 325.

XII. Claims 43-44, drawn to a method for screening drugs that promotes cell survival, comprising assaying for phosphorylation of SEQ ID NO:2 or 3 mutant, classified in class 435, subclass 325.

XIII. Claims 45-46, drawn to a method for screening drugs that promotes cell survival, comprising monitoring viability of cells expressing SEQ ID NO:1 mutant, classified in class 435, subclass 325.

XIV. Claims 45-46, drawn to a method for screening drugs that promotes cell survival, comprising monitoring viability of cells expressing SEQ ID NO:2 or 3 mutant, classified in class 435, subclass 325 .

XV. Claims 47-52, drawn to a method of inhibiting apoptosis in a cell expressing SEQ ID NO:1 mutant, classified in class 435, subclass 325.

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XVI. Claims 47-52, drawn to a method of inhibiting apoptosis in a cell expressing SEQ ID NO:2 or 3 mutant, classified in class 435, subclass 325.

XVII. Claims 53-61, drawn to assaying a compound for kinase activity capable of phosphorylating SEQ ID NO:1 mutant, classified in class 435, subclass 7.1.

XVIII. Claims 53-61, drawn to assaying a compound for kinase activity capable of phosphorylating SEQ ID NO:2 or 3 mutant, classified in class 435, subclass 7.1.

XIX. Claim 62, drawn to a method of screening drugs that promote apoptosis in a cell , comprising contacting a candidate drug with a cell expressing SEQ ID NO:1 mutant, classified in class 435, subclass 325.

XX. Claim 62, drawn to a method of screening drugs that promote apoptosis in a cell , comprising contacting a candidate drug with a cell expressing SEQ ID NO:2 or 3 mutant, classified in class 435, subclass 325.

XXI. Claims 63-64, drawn to antibodies specific for phosphorylated SEQ ID NO:1 mutant, classified in class 530, subclass 387.1.

XXII. Claims 65-66, drawn to antibodies specific for unphosphorylated SEQ ID NO:1 mutant, classified in class 530, subclass 387.1.

XXIII. Claims 63-64, drawn to antibodies specific for phosphorylated SEQ ID NO:2 or 3 mutant, classified in class 530, subclass 387.1.

XXIV. Claims 65-66, drawn to antibodies specific for unphosphorylated SEQ ID NO:2 or 3 mutant, classified in class 530, subclass 387.1.

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XXV. Claims 67-69, drawn to a polynucleotide encoding SEQ ID NO:1 mutant, classified in class 536, subclass 23.1.

XXVI. Claims 67-69, drawn to a polynucleotide encoding SEQ ID NO:2 or 3 mutant, classified in class 536, subclass 23.1 .

In addition, upon the election of any of groups VII-VIII, further election of the following patentably distinct species of the claimed invention is required:

1) Inhibitor H89, 2) A polypeptide that binds to the kinase, 3) A polynucleotide that binds to the kinase, 4) A polypeptide that binds to a polynucleotide encoding the kinase, or 4) A polynucleotide that binds to a polynucleotide encoding the kinase.

Upon election of any of groups XVII-XVIII, further election of the following patentably distinct species of the claimed invention is required:

1) Detecting radioactive label on the serine, 2) Detecting a difference in the electrophoretic mobility of BAD polypeptide, or 3) Detecting the binding of BAD polypeptide to an antibody specific for said BAD polypeptide that is phosphorylated at the serine.

The inventions are distinct, each from each other because of the following reasons:

2. Inventions (I-II, XXI-XXVI) and (III-XX) are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (M.P.E.P. 806.05 (h)). In this instant case, a polypeptide could be used for several

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purposes, e.g. for biochemical assay, for making antibodies, and for making an affinity column to purify its antibodies; a DNA sequence could be used for the detection of similar DNA or RNA sequences, for making an expression vector, and for producing its encoded protein; and an antibody could be used for immunoassay, for purification of its antigen, and for detection of diseases.

The products of groups I-II, XXI-XXVI are distinct because they are structurally distinct.

The methods of groups III-XX are distinct from each other because they differ at least in objectives, method steps, reagents and/or dosages, and/or schedules used, response variables and criteria for success.

The species of groups VII-VIII are distinct, because they are structurally distinct, and/or act by different mechanism.

The species of groups XVII-XVIII are distinct, because they are different assays with different method steps and reagents used.

Because these inventions are distinct for the reason given above and have acquired a separate status in the art as shown by their different classification, and because the searches for the groups are not co-extensive, restriction for examination purposes as indicated is proper.

Applicants are required under 35 USC 121 to elect a single disclosed group for prosecution on the merits to which the claims shall be restricted. Applicant is further advised that a response to this requirement must include an identification of the species that is elected

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consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 USC 103 of the other invention.

Applicants are reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. 1.48(b) and by the fee required under 37 C.F.R. 1.17(h).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Tam B. Davis whose telephone number is (703) 305-2008. The

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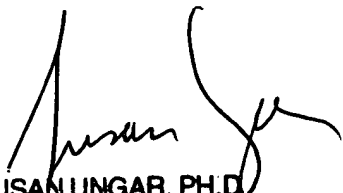
examiner can normally be reached on Monday-Friday from 9:30am to 3:30pm, except on Wednesday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tony Caputa, can be reached on (703) 308-3995. The fax phone number for this Group is (703) 308-4227.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0916.

Minh-Tam B. Davis

August 10/01



SUSAN UNGAR, PH.D.
PRIMARY EXAMINER